

# Notice of Allowability

Application No.

10/760,531

Examiner

Thoi V. Duong

Applicant(s)

MOCHIZUKI, HIROAKI

Art Unit

2871

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment after final filed May 05, 2006.
2. ☒ The allowed claim(s) is/are 1-4, 6 and 9-13.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 050506
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### **DETAILED ACTION**

1. This office action is in response to the Amendment After Final filed May 05, 2006.

Accordingly, claims 1, 6 and 9 were amended, and claims 5, 7 and 8 were cancelled. Currently, claims 1, 2-4, 6 and 9-13 are pending in this application.

### **EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In the title: change the title as "Electro-optical device and electronic apparatus comprising convex and projected portions formed in the alignment film at the periphery of the image display area."

### ***Allowable Subject Matter***

3. Claims 1, 2-4, 6 and 9-13 are allowed.

The following is an examiner's statement of reasons for allowance: none of the prior art of record fairly suggests or shows all of the limitations as claimed.

Specifically, re claims 1 and 9, none of the prior art of record discloses, in combination with other limitations as claimed, an electro-optical device comprising:

a substrate having an image display area defined as an area to form the pixel electrodes and the switching elements, and a peripheral area defining the periphery of the image display area, the alignment film being formed in the image display area and

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the peripheral area, and convex portions being formed in the alignment film at least at a part of the peripheral area and extending in a direction substantially perpendicular to a rubbing direction of the alignment film;

projected portions caused by the height of at least one of the data lines and the scanning lines being formed in the alignment film at a position directly adjacent to the display area,

the convex portions being formed along a direction in which the scanning lines or the data lines extend and the convex portions including a plurality of linear convex portions which are formed along the direction in which the scanning lines or the data lines extend; and

the pitch between the linear convex portions being equal to the pitch between the projected portions (as recited in claim 1); or

the pitch between the linear convex portions being gradually increased or decreased with increasing distance from the image display area, from a place close to the image display area to a place apart from the image display area (as recited in claim 9).

The most relevant reference, USPN 5,953,094 to Matsuoka et al. (Matsuoka), fails to disclose or suggest the pitch between the linear convex portions being equal to the pitch between the projected portions as recited in claim 1 or the pitch between the linear convex portions being gradually increased or decreased with increasing distance from the image display area, from a place close to the image display area to a place apart from the image display area as recited in claim 9. As shown in Fig. 5, Matsuoka's

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reference only discloses an electro-optical device comprising projected portions 14 caused by the height of at least one of the data lines and the scanning lines being formed in the alignment film 16 at a position directly adjacent to the display area, and the convex portions 14b being formed along a direction in which the scanning lines or the data lines extend. Matsuoka is silent about the pitches of the projected portions and the convex portions.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

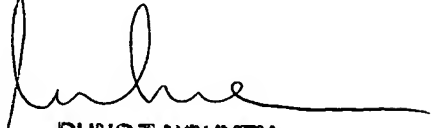
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thoi V. Duong whose telephone number is (571) 272-2292. The examiner can normally be reached on Monday-Friday from 8:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms, can be reached at (571) 272-1787.

Thoi Duong



05/15/2006



DUNG T. NGUYEN  
PRIMARY EXAMINER